



## Sequence Listing

SEQ ID NO.: 1: ESX cDNA ORF and deduced amino acid sequence (See Figure 1)

**SEQ ID NO.: 2:** ESX cDNA sequence (5' untranslated + ORF + 3' untranslated) 1907 b.p.

gccacagccggactccgccactccggtagcctcatggctgcaacctgtgagattagcaacat ttttaqcaactacttcagtgcgatqtacaqctcggaqqactccaccctqqcctctqttcccc ctgctgccacctttggggccgatgacttggtactgaccctgagcaacccccagatgtcattg gagggtacagagaaggccagctggttgggggaacagccccagttctggtcgaagacqcaqqt tctqqactqqatcaqctaccaaqtqqaqaaqaacaaqtacqacqcaaqcqccattqacttct cacqatqtgacatggatggcgccaccctctgcaattgtgcccttgaggagctgcgtctggtc tttgggcctctgggggaccaactccatgcccagctgcgagacctcacttccagctcttctga acccagggccctttgaccagggcagccctttgcccaggagctgctggacgacggtcagcaa gccagcccctaccacccggcagctgtggcgcaggagccccctcccctggcagctctgacgt ctccaccgcagggactggtgcttctcggagctcccactcctcagactccggtggaagtgacg tggacctggatcccactgatggcaagctcttccccagcgatggttttcgtgactgcaagaag ggggatcccaagcacgggaagcggaaacgaggccggccccgaaagctgagcaaagagtactg ggactgtctcgagggcaagaagagcaagcacgcgcccagaggcacccacctgtgggagttca tccgggacatcctcatccacccggagctcaacgagggcctcatgaagtgggagaatcggcat gaaggcgtcttcaagttcctgcgctccgaggctgtggcccaactatggggccaaaagaaaaa gaacagcaacatgacctacgagaagctgagccgggccatgaggtactactacaaacgggaga tcctqqaacqqqtqqatqqccqqcqactcqtctacaaqtttqqcaaaaactcaaqcqqctqq aaggaggaagaggttetecagagteggaactgagggttggaactataccegggaccaaacte acqqaccactcgagqcctgcaaaccttcctgggaggacaggcaggccagatggcccctccac tqqqqaatqctcccaqctqtqctqtqqaqaqaaqctgatqttttqqtqtattqtcaqccatc qtccttqqactcqqaqactatggcctcgcctccccaccctcctcttggaattacaagccctg gggtttgaagctgactttatagctgcaagtgtatctccttttatctggtgcctcctcaaacc cagtctcagacacttaaatgcagacaacaccttcttcctgcagacacttggactgagccaag qaqqcttqqqaqgccctagggagcaccgtgatggagaggacagagcaggggctccagcactt ctttctggactggcgttcacctccctgctcagtgcttgggctccacgggcaggggtcagagc actccctaatttatgtgctatataaatatgtcagatgtacatagagatctattttttctaaa acattcccctccccactcctctcccacagagtgctggactgttccaggccctccagtgggct gatgctgggacccttaggatgggctcccagctcctttctcctgtgaatggaggcagagacc 

SEQ ID NO.: 3: Complete ESX deduced amino acid sequence (see Figure 1)

SEQ ID NO.: 4: First variable region (nucleotides 1-189 of Figure 1)

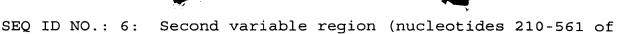
atggctgcaacctgtgagattagcaacatttttagcaactacttcagtgcgatgtacagctc ggaggactccaccctggcctctgttccccctgctgccacctttggggccgatgacttggtac tgaccctgagcaacccccagatgtcattggagggtacagagaaggccagctggttgggggaa cag

SEQ ID NO.: 5: **%** Pointed**%** region (nucleotides 190-309 of Figure 1)

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Figure 1)



SEQ ID NO.: 7: Deduced amino acid sequence for second variable region (amino acids 104-187 of Figure 1)

asn-cys-ala . . . gly-ala-gly

SEQ ID NO.: 8: Serine-rich region (nucleotides 562-714 of Figure 1)

gccccttccctggcagctctgacgtctccaccgcagggactggtgcttctcggagctcccactcctcagactccggtggaagtgacgtggacctggatcccactgatggcaagctcttccccagcgatggttttcgtgactgcaagaagggg

SEQ ID NO.: 9: Third variable region (nucleotides 715-819 of Figure 1)

SEQ ID NO.: 10: Ets DNA Binding domain (nucleotides 820-1062 of Figure 1)

cacctgtgggagttcatccgggacatcctcatccacccggagctcaacgagggcctcatgaa gtgggagaatcggcatgaaggcgtcttcaagttcctgcgctccgaggctgtggcccaactat ggggccaaaagaaaaagaacagcaacatgacctacgagaagctgagccgggccatgaggtac tactacaaacgggagatcctggaacgggtggatggccggcgactcgtctacaagttt

SEQ ID NO.: 11: Fourth variable region (nucleotides 1063-1113 of Figure 1)

ggcaaaaactcaagcggctggaaggaggaagaggttctccagagtcggaac

SEQ ID NO.: 12: C-terminal 16 amino acids (amino acids 356-371 of Figure 1)

lys-asn-ser . . . ser-arg-asn



SEQ ID NO: 13 5'ESX-DBD

5'-CCGGGACATCCTCA TCCACCC-3'

SEQ ID NO: 14 3' ESX-DBD

5'-GTACCTCATGGCCCGGCTCAG-3' (SEQ ID NO. 14)).

SEQ ID NO: 15 Mouse ESX genomic sequence.

GGATCCTTCC AAGGCACTGA CCTCACCCAA TTCTTTCTCA CTTTTCTCCT CCATTTAACT GTGGACGGAA TCAATACTCA GGGGGATGCG CTAGCTCTAA GATTTCTGCA GCTTTGCCTC TCCTGAGCGG AAGCCCCGTG AAGGCAAGGG AGCTAGCTGA TGGACTCTTT GTGGTCTTCT TCCTCTTTGC TCTGGAGACC 201 CAACCAGGTG TTCTTAGGGG AAGGAGCACG TGAGTAGCCA AGAGGCTAAA AGCTGGTTCT CCCACATTCC AGGGTAAGTG ACTGGGTAGA GGGTGTGTCT 251 GCCTCAGGCT GCTTGGAGGA GGTCCCCTGA AGGGCCATGA GAAAATCCTA 301 CCCAGAGCCC TTGGTTTTCC AGCAGCCCTC CACCTAGAGG AAAGGAGCCT 351 GTCGTTCTGA AGATGAAGAG TGGAGCCTAT GGGGGTGGGC AGATTGTGTC 401 451 CTGGGACAAT GGGGTACCTA GAAGAGAAAG GAATCTCCTT TCGTTTGAGG TCTACCTGGG GGTCGTGTGT CTGTAAATGG GGTGGAGAGA GGAGAAGACA 551 CAGATCTTAT AACGTAGATG CAGGAAATGC TGACAGTTCA GTGTAGAGAA CTTACTCAAT TCATATAGCC TCCAAAGCTA TCTCCTCAGG CAACGCAAAA 601 CAAACCAGTT GGAGCCGCAA GACATCTAAT GGCTTATCGA GTCCCACACC 651 701 CTCGATTCTT TGCTAATTTT ATGGTTTTGC TTTTGAGACA ATCTACTGTA GCCTAAGATA GCCCCAAACT CAAATGTAGC TGAGGCTGAC TGACCCTGAG 751 CTCTGGAATT CCAGACACAT GCATATCTTT TGCTAGGCAA TAATCGCTCT 801 851 ACCAGCTGTA CTCCCACATT CCAGGGTAAG TGACTGGAAT TCTCACTTAC 901 TATATCCCTT TAAAAATTCC CTGAGTGGGA TGGTTGTAGC CAGAGGGAAA 951 AGGCACCAAC AACTGCTTGT CACTTTCCAA ATTTGGTAGC CTGAACAAAC 1001 1051 TCTCTCTCT TCTCTCTCT TCTCTCTCT TCTCTCTTTTN 1101 GAAAGAGTCT CACTACTATG TAGCCCTTGA TAACCTAGAA CTCACTATGT 1151 AGTCCAGGCT TGGCCTTCAG CTCGCAGAGG TCCACTTGCC TTGGGAGTTG

AGAGATTAAA GGGATGCATC TCCACATGTG TCCAACAGTG CTTTTTAAAA

1251 ATATTTTAA AACCATGCTT ACAGCCAGGC ATAGTGGGCG TGCCTTTAAT 1301 CCCAGTACTG GGGAGGCAGA GGTAGGTAGA GTTCTGAGTT GGAGGCTAGC CACATAGTAA GTCCCAGGAT AGCTAGAACT ATGTAAAGAC CATGTCTCAA 1351 1401 AAAAGATGCA CACACACATA TACACACACA CGTTTGTATG TGTTTGTTTA 1451 GTGTGTATGT GTGTGTACAC TTGCACATAA AGGTCAGAGT ACCACATTAC AGGAGTCAGT TTTCTCCTTT TATCATGTAT GGATGGAACA CGGGTCCATC 1551 CATAGCATCC TTAGCAGCAG GTATCCTTAT CCACTGAGCT ATCTCAGCAG 1601 CCCCACATTG CTTATTGGAT GTTTTTGGAT GAGGATAGTT ATATTAAAAA 1651 GGTTTCTGGT GTTGGTCTGG GTAGTTACCC TTTAACCCAT CTCTAGAGCC 1701 TGTCTCTTGA GTTTGAGGCC AGCCTGGTAT ATGTAGCTAG ACAAAGTTTC 1751 AAAAATGAAC AGAATCCTGG GACTAGAACC CATTTGTAGA ATGCTTGCAT AAGAAGCTCT GGGTTCAACT TCCTGCATCT CCAGAGGGAT TTTGTTCTGT 1801 AGTTTTAGTT TTTCAAGACA GAGTTTCTCT GTGTAGCCCT GGCTGTCCTG GAACTCACTC TGTAGACAAG GCTGGCCTCG AACTCAGAAA TCCTTCTACC 1901 1951 TCTACTTCAG GAGTGCTGGG ATTAAAGATG TGCGCTGCCC TCCTCCACCC CAATTTGTTT TTGTTTTTTA AGGGCCCCGG TAAACAGTAA ATTAACATGT 2001 2051 GCATCCTGTT TGTCTTTGTA ATGACTCAAA TGTTGGGCTT CTGACCACTA GAGGGCAGCA GGCAGATACT AATGGACTGG GCGGAGAGAA GGGTAATCAG 2101 GAGCAGACCA GACTCGCGGA TAAACCAAAC AGCACCGCCA GCCGACCCTA 2151 2201 GGCGAGGAG GCGCCACAGG CACCAAGGGA AGACTTGAAG TAGTGTCTGA 2251 TCTCTACCGC TTCAGCAACC ATCGCGTTTG GGTGGGCTCC AGACAGGCAA 2301 AGTGCCAGCA AATGGTCCCT GTAGCTGACT AAACAGACTA TCAGACCCAA 2351 ACCACCACTG GACCGTGAAT GTTGCCCAGT GTGTTGCCTA GCCGCTTTCA 2401 GAATCCCAGC TTCTGGGTGT TGTGGAGGAA ACCCCTTAGC CTCGGTAACT

2451 TTCACCAGGC CCTTCTTGTC TCTAGACATC TAGACAGTTG GAAGCATCAG TCTTGACCCA GCCACCGGTT CAGATTCTTT GCCTTGCTTT TTCTTCCCCA 2501 GTTCAGCCCT GGCCAGGCCC CCAGGAAGAA TTTCCAGGGC CAGAGGGCAG 2551 CCTAAGGCAC AGATGCCCAC CCCTGCAATG TTCCCGCCAC ATGCCCAGTT 2601 2651 CAGTACCCAG GGCCCAACCC CAGAGGGTGC GGAATGACAG ATTCTGACAA 2701 TCATTAAACC AGCCAGGCCT GATTTCCCAG CACCGCCCGT TAGGATATGG 2751 GCCAAGTGGC ACGGAATATG CAAATCACAT GGGACAGGGA GCCCAGTCTG 2801 AAGGCCAGGA AATCCCCAGC ATCCAATGAG CCACCAGCTC AGGTTACAAC 2851 CGGGGACGTA CGCCGAAGAC CTGGAGGGGA GGAGCTCCTG CTTTGCTCTA 2901 TTTAGAGCGG GTGGGGGCAG CGCCCTGGCC ACACTCATCA CTGCTACCTG 2951 CGGAGCCTTC GACCGCTTAG ATTTTTTCCC TTCCTGTGGC CTCAGAAGCC 3001 TGCTCACCCG CCTGCCACAC CGAACCCTGA CACACCTCGG TACGGTCACA 3051 TTCCCTAACT CTGGCTCCAG GAACCGTCCA GTGGATTTAC AGTTCTGAAC 3101 TTAATCACTC AGGCTTGGAG GTTCCTAGCT GGAGTGTTGG GGCTACTGTG 3151 GGTGTATTCT GGGACTGGTC AGAGACCAGA TCGGTGTCTT GGAGGGACAG 3201 GGTGGCTTCT TTGGTTCAGG AGCCCACGTG ATTTGTGGAG AGACCCCAGA 3251 AGAATTTGTA TCATGCTCCC ACCCGCTTTG AGATTATTTT TATTTTTCGG 3301 AGCCGAATTT CCCAGTTTGG CGCCAGCTGG CCTGACCCTT CTAGGCTCAA 3351 GAGAGCATCC AACCTCAGCT TCCCCAAGTA GCTGGCTCTT GGTGGTGATG GTGGTGGTGG TGGTGGTGGT GGTGGTGTG GTGTGTGTT TTGTGTGTGT 3401 3451 GTGGTGGTGG GGGGGGTGTT GAAGAGAGAA TGTCTACAGC AACACTGAAC 3501 TTCCTGCCTC TCGGCTGTTG CTGCCCAGGC TTTGCCAGAC AGAAATGGAA 3551 GTGTATCCTG ACCTGTACCC TCCCCACCTT GTCTCCTCTT CCCAGGGGCC 3601 CTCATGGCTG CCACCTGTGA GATCAGCAAC GTTTTTAGTA ACTACTTCAA 3651 CGCCATGTAC AGCTCAGAAG ACCCCACCCT GGCTCCTGCT CCTCCGACTA

3701 CCTTTGGCAC TGAAGACTTG GTGTTGACCC TGAACAACCA ACAGATGACA 3751 CTGGAAGGTC CAGGTGAGTG CTGTGTAAAA TCTTTTCAGA CAGGACACCA ATGATCTGAG AGGCTCTTAG ATGATAAATG GACAGGGAGG AAGGGTATCC TGGAGTTAGT GGCTGGGGAG GATTTATTCA TTCATATGTT TGTGTAGTAC 3851 3901 TGGGGAAAGA ACCCAAACAA GACCTTATTT ATGCTAGACT GTGTTCCTAG 3951 TCCCGAGAAG ACTGTACTGG CTGAGGTGGT GGGAATATAA GAACTGTGGT 4001 GACAGATTAA GGGAGGATGA ACTTGAGAAC TAGCCATGTT GTGATTGTGG 4051 ATATGTATCT GTCCCTCTCC GCCCTCCTC GGGTTGTGTA GGACCTCAGA 4101 CAAGATCCCA AAGGGACAGG ACTGATCCTC TGGCTGTACT CCACCTTGCA GAGAAGGCAA GCTGGACTAG CGAGCGGCCC CAGTTCTGGT CGAAGACCCA 4151 GGTTCTGGAG TGGATCAGCT ACCAAGTGGA GAAGAACAAG TATGACGCCA 4201 4251 GCTCCATCGA CTTCTCCCGC TGCAACATGG ACGGAGCCAC CCTCTGCAGC 4301 TGTGCGCTGG AGGAGCTGCG GCTAGTCTTT GGACCTCTGG GAGACCAGCT CCATGCCCAG CTTCGGGACC TCAGTAAGTC TAGGCTGGGA GCCACAGGGC 4351 CTAAAGAGTG AGCGAGGTGG CTGGGACTTG GGCAGGAGGG TGCAGCCATC 4401 GAGCCCTGC CGGAACCATG GTCGGTGACG CTCTCCCTCC CTGCCTCCGC 4451 CAGCCTCCAA CTCTTCTGAT GAACTCAGCT GGATCATCGA GCTGCTGGAG 4501 4551 AAGGATGGCA TGTCCTTCCA AGAGAGCCTA GGCGACTTGG GCCCCTTTGG 4601 TGAGAACCCA TTTTCTCCCT TTTTCCTCCC TAGCTTGTCT TGTCCCATCT GTAACTCCTC CAGAGTGCTA CAGATATTCT CTCCCAACTT GAAAATAAGT 4651 4701 CCATAGTCAT TTCTGTGGTC CCTGGAGGGT CGTGCCTGTC CTTGCTGGTA 4751 TCCTGGGCCT CTCTAAGCTC TTAACTTCTT TTCTCAGATC AGGGAAGTCC TTTTGCCCAG GAACTCCTGG ATGATGGCCG CCAGGCCAGT CCCTACTACT 4801 GCAGTACCTA TGGCCCTGGA GCGCCCTCCC CCGGCAGCTC TGATGTCTCC 4851 ACTGCAAGTA AGTCCTGCCC TTGCCACAGC CTGCCTTCTC CAAGTGCCCT 4901 AGAGTGCATC GAGTTCTTAC AATACTCATT CAGTATCTGA AGTCTGGGTA 4951 CGCAGTGACT GGGTAGGCTG GCCCTGGCAT TCAAGTGGTA TTCTTCACCC 5001 CTAGGGACCG CTACTCCCCA GAGTTCCCAT GCCTCTGACT CCGGTGGAAG 5051 5101 TGATGTGGAC CTGGACCTCA CCGAGAGCAA GGTCTTCCCT AGAGGTGAGT 5151 TGAGGGCTGT TCTTGGGGGT CCTGTCCATG GGGTCTAGCC ACTCCCCTCT 5201 GCCCTATGGC TGCAGTTTCT GTACCAAGGC TCCCTGTTGA CACCCTGCCC TTACCTTCTC TTGACCTTCC AACCCCCTTC CCATAGATGA CTTTACTGAC

